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ABSTRACT

The lack of substance in many methods courses stems from the lack of a systematic procedure for identifying specific teaching behaviors. Methods courses in general fail to differentiate between learning and teaching. This paper presents a paradigm which can be used for the systematic identification of effective teacher behavior. The three axes of the paradigm are methods; teaching skills; and interactive arrangements, which include verbal behavior, nonverbal behavior, and physical arrangements. Each axis is comprised of subcategories which are interdependent on all or some of the subcategories of the other axes. The document includes a diagram of the paradigm, a description of each component, and the recommendation that the minicourse is an effective instructional model for teaching identified performance skills to the intern. (JA)

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A PARADIGM FOR IDENTIFICATION OF PERFORMANCE BASED TEACHING SKILLS

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The performance of student teachers in the classroom may be improved by teaching specific skills, methods and the effects of physical arrangement of students and instructional aids in methods courses. Identification of skills can be accomplished through the use of analysis, application of research findings and observations made by supervisors and methods teachers. The microteaching format is one delivery system for assisting the intern to gain realistic experience prior to entering the classroom.

Observation of teacher interns in the classroom has continually indicated that interns lack specific knowledge of applied teacher behavior for successful performance. The responsibility for the lack of performance capability may not be that of the student. A postulated reason for the limitation in the behavior repertoire of interns is the failure of methods courses to provide students with feasible alternative styles of teaching behavior. For the profession to accept that interns will teach as they have observed others teach, or learn after graduation and in the classroom, is a negation of professional responsibility to prepare teachers with at least introductory level skills.

The origin of the lack of substance in many methods courses can be traced to the lack of a systematic procedure which can be applied for identification of specific teaching behaviors. Methods are commonly based on tradition, social learnings, philosophy, teacher needs, conditions which exist in the school and community, and fragmented patterns of scientific research on learning.[1] Results of these procedures have been methods courses which emphasize examination of belief and attitude systems but are extremely lacking in assisting the intern to develop specific teaching skills for use in the classroom.

Research on teaching as differing from research on learning has only recently received the scrutiny of an applied scientific method. Gage points out a reason for failure to do research on teaching as a failing to make a ". . . basic distinction between research on learning and research on teaching. The former deals with all the conditions under which learning, or a change in behavior due to experience, takes place. Research on teaching, on the other hand deals with a subset of the conditions under which learning occurs in one person, namely, the conditions established by behaviors of another person, called the teacher."[2]

Methods courses in general have failed to differentiate between learning and teaching. A systematic analytical procedure

which can be used to identify teaching behaviors needs considerable development. As a result, interns have little assurance that they have been taught skills which result in at least introductory acceptable performance in the classroom. Application of analysis to the macro concept of teaching behavior by both clinical professors and researchers could serve to more rapidly identify specific teaching skills.

One of the more frequently given arguments against identification of specific skills is that "effective" teachers cannot be identified. There is however, considerable agreement among methods teachers, supervisors, administrators, teachers and students on identifiable criteria of effective classroom teacher. In fact, ". . . successful teaching is not quite so hopelessly multichotomous as some people believe. It can . . . be determined empirically both in terms of the percentage of agreement among supervisors and of the criteria they use in arriving at agreement . . . " as to characteristics of effective teachers.[3]

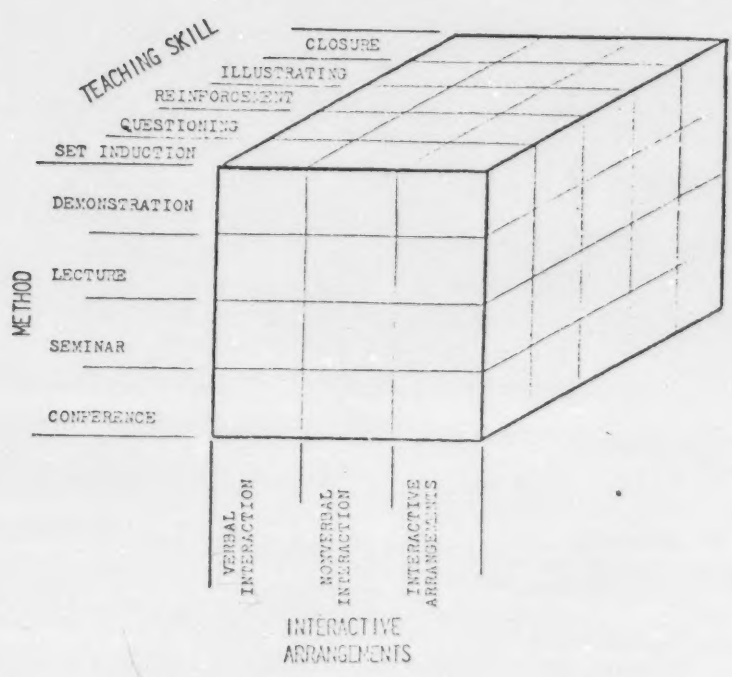
A PARADIGM FOR TEACHING PERFORMANCE IDENTIFICATION

Teachers of methods need a model which can be used to systematically identify performance skills which can be used by the intern. This model must be based to the extent possible on known aspects of effective teaching behavior. The ". . . concern

with theories and paradigms is therefore aimed at furthering more systematic and orderly approaches to the formulations of . . ." identifiable teaching skills which can be taught and are susceptible to hypotheses formulation and testing.[4]

A paradigm which can be used for the systematic identification of effective teacher behavior based on teaching skills (Allan and Ryan, 1969), verbal behavior (Amidon and Flanders, 1967), nonverbal behavior (Galloway, 1968) and the importance of physical arrangement (Amidon, 1971) is diagrammed.

PARADIGM FOR DEFINING PERFORMANCE
BASED TEACHING SKILLS



The three axes of the paradigm are: (1) methods, (2) teaching skills and (3) interactive arrangements which include verbal behavior, nonverbal behavior and physical arrangements used in the classroom. Each axes is comprised of subcategories which are interdependent on all or some of the subcategories of the other axes. Further examination of subcategories will reveal these interdependencies.

Methods. The subcategories of methods are: lecture--a predominantly verbal presentation of information from the teacher to the student, demonstration--a combination of verbal explanation with the physical manipulation of the body or physical objects, seminar--an organization of students for discussion which may be either teacher directed or student directed, and conference--the teacher and student, or select individuals, for purposes of discussing, identifying and possibly solving specific problems pertinent to the individuals involved.

Each of the methods is dependent on specific teaching skills such as set induction, questioning, reinforcement, illustrating and closure, but variation in the skill used may be determined by the method. Set induction for a lecture-oriented classroom

may differ considerably from set induction in a conference, but both methods require some form of set induction.

Teaching skills. Skills which assist the intern in use of methods in the classroom have been identified and taught in microteaching sessions. The skills which seem to have the most implication are set induction, questioning strategies, reinforcement, illustrating and using examples, and closure from the list of fourteen skills identified for microteaching.[5]

Interactive arrangements. The three subcategories of interactive arrangement include the use of verbal interaction analysis, nonverbal analysis and physical arrangement.

Verbal interaction analysis[6] has three divisions: direct teacher behavior, indirect teacher behavior and student verbal behavior. Application of verbal analysis assists the intern in examining verbal behavior as related to teaching style.

Nonverbal behavior[7] is a classification system which can be used to examine the gestures and physical motions of the intern.

Physical arrangement[8] of the classroom affects the arrangement of students, influences the method of instruction and tends

to assist in defining the atmosphere of the classroom.

Each subcategory of interactive arrangement is similarly interdependent to the other axes of the paradigm.

Performance Skill Identification

The paradigm, by application of the procedures of analysis and synthesis, serves as the basis for identification of specific teacher performances for classroom application. The number of performance skills which can be identified would normally exceed the length of any methods course thus requiring the methods instructor to devise a systematic procedure for teaching interns.

An example of this would be applicable to teaching set induction. Set induction in the lecture method requires a specific teacher behavior, physical room arrangement and anticipated student response. As set induction is introduced in the demonstration method, class arrangement, use of materials, verbal and nonverbal behavior modify with the changed teaching method. This same change of different variables is required as set induction is introduced in the seminar or the conference.

The intern's capability to compare differences and similarities of set induction in each of the four methods assists in further application of different skills to different teaching methodologies.

As the course progresses it becomes apparent to the intern that rigid application of skills or methods is not in congruity with the classroom teaching environment. The complete application of analysis to the paradigm for identification of every skill becomes unnecessary. The intern begins to see and apply relationships among the three axes of methods, skills and interactive arrangements.

Teaching Strategy

The minicourse is an effective instructional model for teaching of identified performance skills to the intern. Elements of the minicourse are:

1. The use of microteaching as a model for instructing interns
2. The identification of technical skills which can be taught interns in a logical systematic procedure
3. Modeling of technical skills which can serve as input and evaluation to the intern
4. Practice and feedback emplasizing self-evalution by the intern on performance as specified for the technical skill.[9]

The essentials of microteaching are that: (a) actual teaching takes place, the intern must perform the identified skill and not be a passive recipient, (b) the number of students

and the length of time is controlled, usually lessons of no more than five minutes which focus on a specific skill, (c) the focus of the microlesson is very specific emphasizing a skill as a part of a method, (d) the instructor has considerable control over variables of student behavior, setting, time and focus of the lesson, and (e) feedback is given the student on the basis of performance.[10]

The model serves as an effective delivery system in the methods classroom, especially with the use of an audio or preferably audio-video feedback system which can be used by the intern. Limitations of the microteaching model are:

1. The threat felt by some interns in having to perform before a recording device and in front of their peers;

2. The time consumed in working with classes of twenty-five or more students to provide adequate opportunity for the intern to perform and receive assistance in analysis of behavior;

3. The repetitive nature of microteaching format can prove to be boring to the intern and lead the intern to develop negative attitudes towards performance-based methods instruction.

These limitations are not insurmountable to the instructor and by careful observation and scheduling can be alleviated prior to becoming detrimental to the intern. The key to success still seems to be highly dependent upon a flexible, sensitive

and understanding instructor in using the delivery system for teaching performance skills.

Implications and Recommendations

The need to move from a global methods approach to a skill approach seems apparent to persons working as methods teachers and supervisors of interns in the classroom. A philosophical-theoretical approach has frequently left the intern standing before a group of students with little idea of the necessary skills which will assure introductory success in the development of student-teacher relationships.

Identification of applicable skills seems essential and, ". . . the task of defining effective teacher behaviors is difficult . . . . However the problem is still in the hands of methods, supervisors and cooperating teachers as to the exact behavior of student interns."[11]

Some implications in the development of a performance based teacher methods program are:

1. The necessity of developing a program which has internal accountability meaning that specific goals can be identified, instruction proceeds toward achievement of the goals and evaluation of intern capability to perform to the criterion expectations of the goals is possible.

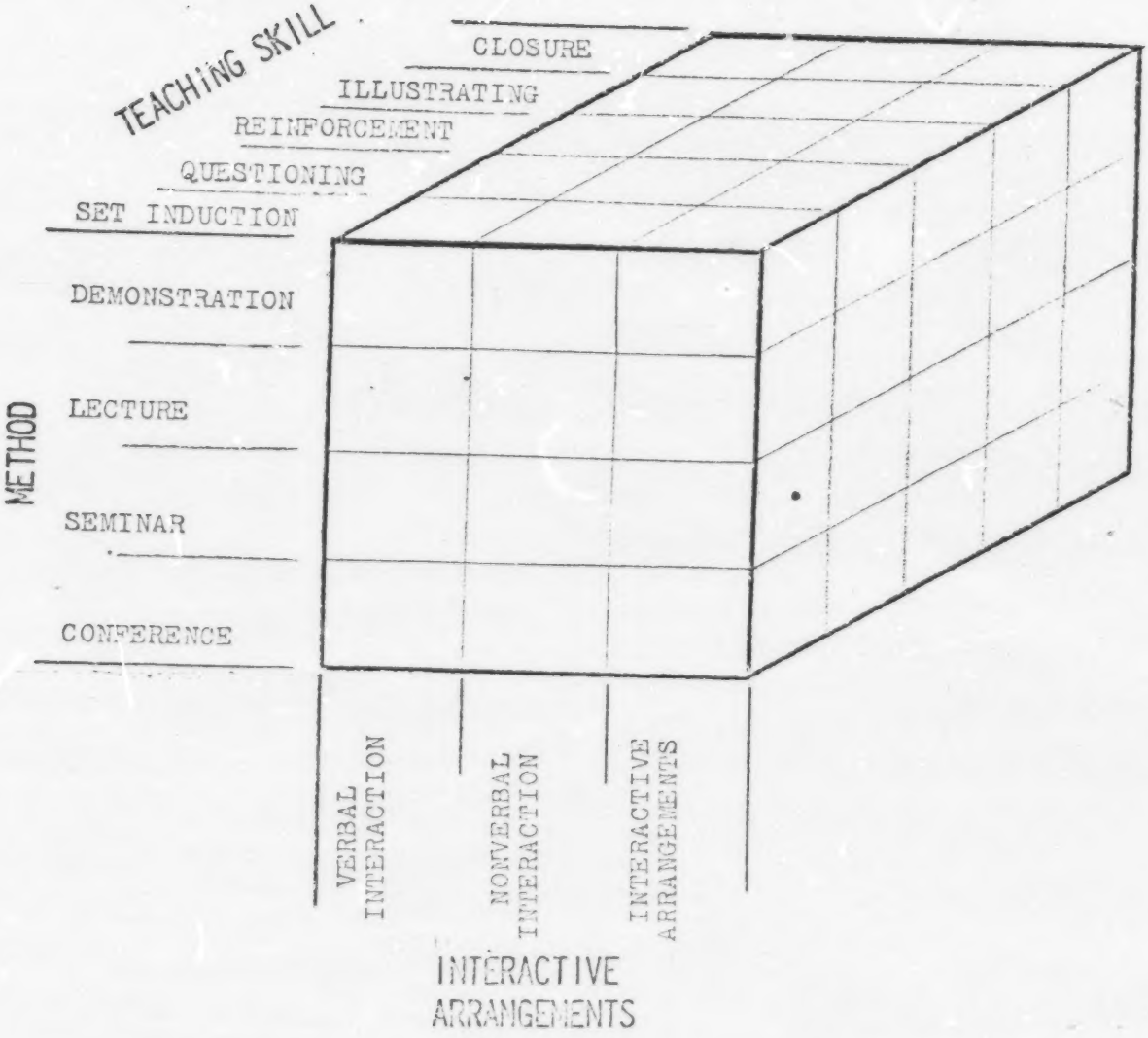
2. Application of a systematic analytical method

for identification of teacher behaviors is necessary and should be based on observation, research and application to the classroom environment.

3. Research should serve as the bases for identification and verification of performance skills.

4. Methods courses will teach interns introductory skills which will assure success in the classroom.

5. Application of analysis should result in identifiable teacher performance skills which can be used for diagnostic and prescriptive purposes in the process of individualizing instruction of teacher interns.


TEACHING SKILL
CLOSURE
ILLUSTRATING
REINFORCEMENT
QUESTIONING
SET INDUCTION
METHOD
DEMONSTRATION
LECTURE
SEMINAR
CONFERENCE
VERBAL INTERACTION
NONVERBAL INTERACTION
INTERACTIVE ARRANGEMENTS
INTERACTIVE ARRANGEMENTS

FOOTNOTES

[1]Norman E. Wallen and Robert M. Travers, "Analysis and Investigation of Teaching Methods," Handbook of Research on Teaching, N. L. Gage, editor (Chicago: Rand McNally and Co., 1963), pp. 448-500.

[2]Nathaniel Gage, "An Analytical Approach to Research On Instructional Methods," Phi Delta Kappan, XLIX, No. 10 (June, 1968), pp. 601-606.

[3]George S. Cheong, "Can Successful Teaching Be Empirically Determined," The Journal of Teacher Education, XXI, No. 2 (Summer 1970), p. 185.

[4]N. L. Gage, "Paradigms for Research on Teaching," Handbook of Research on Teaching, N. L. Gage, editor (Chicago: Rand McNally and Co., 1963), pp. 94-141.

[5]Dwight Allen and Devin Ryan, Microteaching (Reading: Addison-Wesley Publishing Co., Inc., 1969), pp. 15.

[6]Edmund J. Amidon and Ned A. Flanders, The Role of the Teacher in the Classroom (Minneapolis: Association for Productive Teaching, 1967), p. 14.

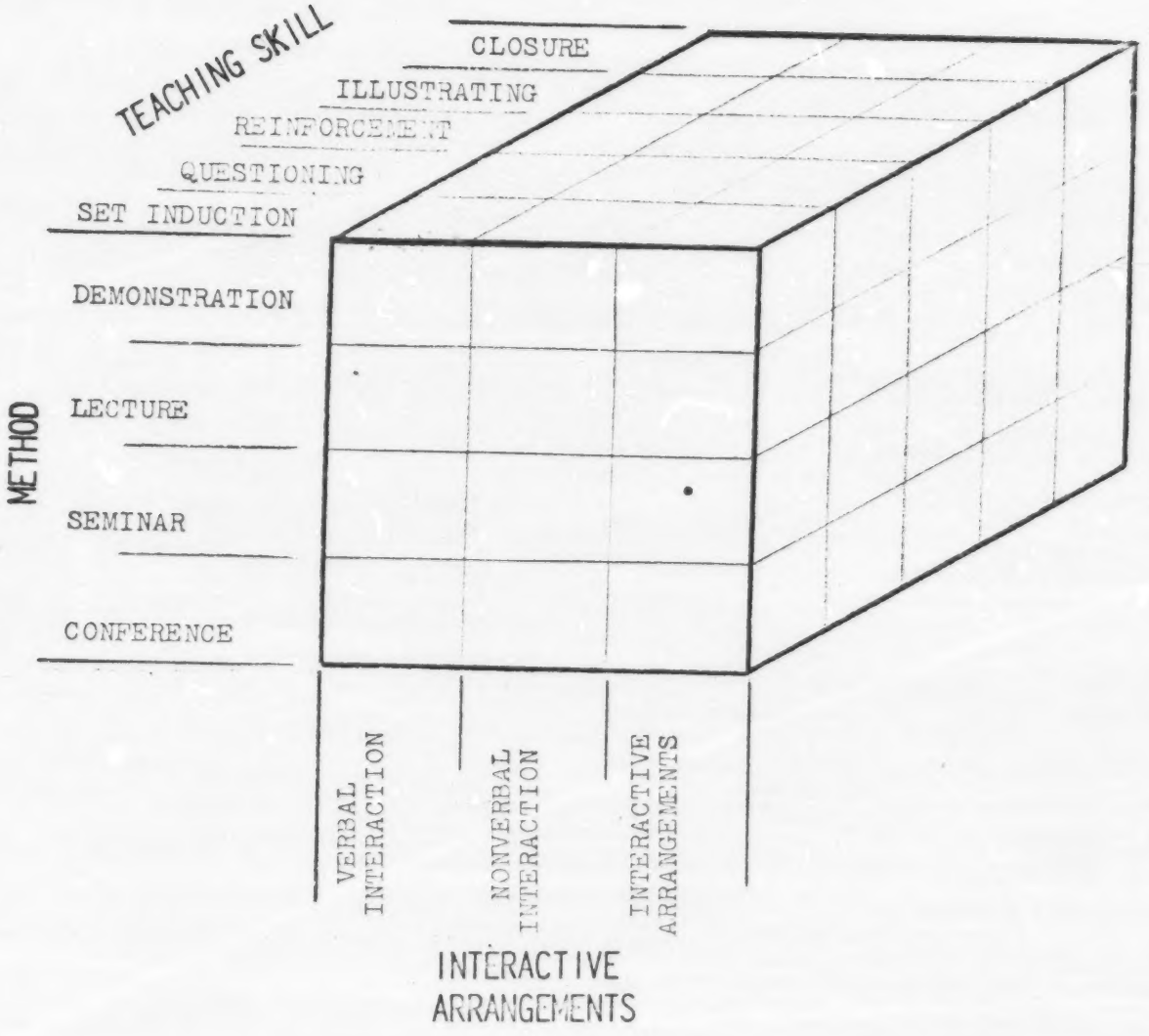
[7]Charles Galloway, "Nonverbal Communications," Theory Into Practice, VII (December, 1968), p. 172ff.

[8]Peggy Amidon, Nonverbal Interaction Analysis (Minneapolis: Paul S. Amidon and Associates, Inc., 1971), pp. 1-4.

[9]Walter Borg, Marjorie Kelley, Phillip Langer and Meredith Gall, The Mini Course: A Microteaching Approach to Teacher Education (Toronto: Collier-Macmillian Canada, Ltd., 1970), pp. 32-52.

[10]Dwight W. Allen and Arthur W. Eve, "Microteaching," Theory Into Practice, VII, No. 5 (December, 1968), p. 181.

[11]John H. Meier, "Rationale For and Application of Microteaching to Improve Teaching," Journal of Teacher Education, XIX, No. 2 (Summer 1968), p. 147.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